

Remarks

By this Amendment, claims 2 and 7 have been rewritten in independent form. In the Office Action, the Examiner indicated that these claims contained allowable subject matter.

The Examiner objected to claims 8 and 10-14 as being improperly multi-dependent. By this Amendment, these claims have been rewritten to be in conformance with U.S. practice. An action on the merits of these claims is respectfully requested.

The Examiner rejected claims 1 and 6 as being anticipated by Williams (U.S. 4,647,385) and claims 1, 6 and 9 as anticipated by Argillier et al (U.S. 5,618,780). These rejections are respectfully traversed.

Williams discloses a process for reducing the viscosity of thickened fluids, including fracturing fluids. Alkali metal and alkaline earth metal salts of hypochlorous acid and a tertiary amine, both using concentrations of about 0.25-25% by weight, are added to fluids comprising water soluble polymers used in concentrations of about 0.1-10% by weight. Water soluble polymers may be polyacrylic acids and the tertiary amine may be triethanolamine.

The patent discloses that the salt and tertiary amine are added together to reduce viscosity of the fluid. The viscosity is reduced by oxidizing the polymer to break it into smaller fragments. The tertiary amine does not act as an activator for ionizing the polyacrylate to hygroscopic state, as recited in claim 1. Claim 6 claims the principal of ionic disassociation. The salt functions as an electrolyte and is added in order to prevent polymeric change from crosslinking. No breakdown of the polymer into smaller fragments occurs in the present invention. This distinction is recited in both claims 1 and 6.


Argillier et al. discloses an optimized lubricating composition comprising an ether and a fatty acid. Base fluids include polyacrylate, KCl or NaCl and some of the testing compositions include triethanolamine, and several additional elements such as bentonite, viscofiers and a filtrate reducer.

The lack of these additional elements in claim 1 changes the nature of the fluids, resulting in different properties from those of the disclosed fluids. None of the base fluids includes triethanolamine. Triethanolamine is only added as part of the ether, fatty acid composition. The addition of ether and fatty acid changes the chemistry of the fluid to one based on etherification. Where KCl and NaCl is present in the base fluid, it is of relatively high concentrations outside the scope of the claims 6 and 9. New claims 15-20 further distinguish over Argillier et al. by the use of the preamble "consisting essentially of", precluding the presence of other active ingredients.

The claims are allowable over the prior art and favorable action is eagerly and earnestly solicited. If any issues remain, and the Examiner believes that a telephone conversation will resolve such issues, the Examiner is urged to contact the undersigned attorney.

A two month extension of time accompanies this response. If any additional fees are due and owing, the Commissioner is authorized to charge Deposit Account 08-2455.

Respectfully submitted,

  
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Reg. 41,533

October 2, 2003

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Attorney's Docket: A-7641.AMA/eb